

# TRANSPORTATION CABINET

Steven L. Beshear Governor Frankfort, Kentucky 40622 www.transportation.ky.gov/

Michael W. Hancock, P.E. Acting Secretary

November 9, 2009

Division of Water Water Quality Certification Section ATTN: Jesse Robinson 200 Fair Oaks Frankfort, KY 40601

SUBJECT:

Water Quality Certification #2008-0062-1 Amendment Request

AI No.:96805, Activity ID: APE2007001 Mason County Item No. 09-0124.01

**US-68 Relocation** 

Dear Mr. Robinson:

Submitted is a request for a Water Quality Certification amendment. The subject project has been redesigned under the KYTC's practical solutions initiative. As result, previously permitted stream and wetland impacts have been revised. The payment of an in-lieu fee to the Kentucky Department of Fish & Wildlife is proposed for mitigation due to limited opportunities for on-site mitigation.

Enclosed are revised drawings, a narrative summary of impacts and a summary of impacts table. If you have any questions or need additional information, please contact me at (502) 564-7250 or by email at ronb.rigneyii@ky.gov.

Sincerely,

Ronald B. Rigney, II

Division of Environmental Analysis Kentucky Transportation Cabinet

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# ATTACHMENT BLOCK 22

#### **SUMMARY OF 404 IMPACTS**

# Mason County US-68 Relocation Item Number 9-124.01

#### **Culvert Impacts by Proposed US-68 Realignment**

## Site No. Description

- 1. Station 151+47 E18 Construct a 30" pipe 92 feet in length. This site will impact 289 feet of UT to Wells Creek. Field investigations indicate this stream is ephemeral in nature with a watershed of 10.5 acres. The impact to waters is 0.040 acres. The length of the inlet headwall is 12 feet. The length of the outlet headwall is 5 feet. In addition, 95 feet of flat bottom channel construction is associated with this culvert impact. (Nationwide Permit No. 14).
- 2. Station 549+25 I3 Construct a 54" pipe 213 feet in length. This site will impact 126 feet of UT to Wells Creek. Field investigations indicate this stream is intermittent in nature with a watershed of 41.3 acres. The impact to waters is 0.010 acres. The length of the inlet headwall is 7 feet. The length of the outlet headwall is 6 feet. In addition, 68 feet of flat bottom channel construction is associated with this culvert impact. (Nationwide Permit No. 14).
- 3. Station 589+00 I5a & b Construct a 42" pipe 321 feet in length. This site will impact 430 and 306 feet of UT to Lawrence Creek (Not including existing culvert). Field investigations indicate these streams are intermittent in nature with watersheds of 71.3 and 77.4 acres, respectively. The impact to waters is 0.034 acres, collectively. The length of the inlet headwall is 5 feet. The length of the outlet headwall is 5 feet. In addition, 48 feet of flat bottom channel construction is associated with this culvert impact. (Nationwide Permit No. 14).
- 4. Station 646+20 l6 Construct a 60" pipe 363 feet in length. This site will impact 468 feet of UT to Clarks Run Creek. Field investigations indicate this stream is intermittent in nature with a watershed of 125.4 acres. The impact to waters is 0.032 acres. The length of the inlet headwall is 10 feet. The length of the outlet headwall is 10 feet. In addition, 33 feet of flat bottom channel construction is associated with this culvert impact. (Nationwide Permit No. 14).
- 5. Station 684+40 P4 Construct a 16' x 6' box culvert 323 feet in length. This site will impact 880 feet of UT to Lawrence Creek. Field investigations indicate this stream is perennial in nature with a watershed of 647.9 acres. The impact to waters is 0.152 acres. The length of the inlet headwall is 6 feet. The length of the outlet headwall is 6 feet. In addition, 154 feet of flat bottom channel construction is associated with this culvert impact. (Individual Permit).
- Station 701+47 I8a & b Construct a 72" pipe 134 feet in length. This site will impact 59 and 90 feet of UT to Lawrence Creek (Not including existing culvert). Field investigations indicate these streams are intermittent in nature with watersheds of 97.5 and 116.7 acres, respectively. The impact to waters is 0.010 acres, collectively. The length of the inlet headwall is 12 feet. The length of the outlet headwall is 12 feet. In addition, 95 feet of flat bottom channel construction is associated with this culvert impact. (Individual Permit).

## Impacts by Proposed Roadway Fill / Channel Change

- 7. Station 515+75 to 523+10 P1 This site will impact 861 feet of UT to Wells Creek. Field investigations indicate this stream is perennial in nature with a watershed of 326.1 acres. The impact to waters is 0.119 acres. In addition, 213 feet of 84" pipe and 635 feet of flat bottom channel construction are associated with this impact. The length of the inlet headwall is 12 feet. The length of the outlet headwall is 12 feet. (Individual Permit).
- 8. Station 546+20 to 549+75 P1 This site will impact 413 feet of UT to Wells Creek. Field investigations indicate this stream is perennial in nature with a watershed of 92.5 acres. The impact to waters is 0.047 acres. In addition, 100 feet of flat bottom channel construction are associated with this impact. (Nationwide Permit No. 14).
- 9. Station 549+75 to 561+00 I4 This site will impact 1,275 feet of UT to Wells Creek. Field investigations indicate this stream is intermittent in nature with a watershed of 38.8 acres. The impact to waters is 0.117 acres. In addition, 165 feet of 36" pipe and 1125 feet of flat bottom channel construction are associated with this impact. The length of the inlet headwall is 15 feet. The length of the outlet headwall is 15 feet. (Individual Permit).
- 10. Station 561+00 to 563+31 E7 This site will impact 210 feet of UT to Wells Creek. Field investigations indicate this stream is ephemeral in nature with a watershed of 12.4 acres. The impact to waters is 0.007 acres. In addition, 180 feet of flat bottom channel construction are associated with this impact. (Nationwide Permit No. 14).
- 11. Station 631+68 to 632+72 P2/P3 This site will impact 155 feet of Clarks Run Creek. Field investigations indicate this stream is perennial in nature with a watershed of 491.8 acres. The impact to waters is 0.021 acres. (Nationwide Permit No. 14).
- 12. Station 681+04 to 681+90 E14 This site will impact 126 feet of UT to Lawrence Creek. Field investigations indicate this stream is ephemeral in nature with a watershed of 20.4 acres. The impact to waters is 0.012 acres. (Nationwide Permit No. 14).
- 13. Station 681+22 to 683+80 I7 This site will impact 343 feet of UT to Lawrence Creek. Field investigations indicate this stream is intermittent in nature with a watershed of 112.2 acres. The impact to waters is 0.039 acres. In addition, 320 feet of flat bottom channel construction are associated with this impact. (Nationwide Permit No. 14).
- 14. Pond 10 Construct a controlled fill over **0.422 acres** of jurisdictional pond near Station 679+00. This pond is associated with the ephemeral stream impact for Station 681+04 to 681+90 E14. This impacts **262 feet** of UT to Lawrence Creek. Field investigations indicate this stream is **ephemeral** in nature with a watershed of **20.1 acres**. The impact to waters is **0.024 acres** (Nationwide Permit No. 14).

# **Impacts to Wetlands**

15. Wetland 1 - Construct a controlled fill over **0.087 acres** of jurisdictional wetlands near Station 632+94. This wetland is associated with the perennial stream impact for Station 631+68 to 632+72 P2/P3. Mitigation for this wetland will be compensated for with the KYTC wetland bank associated with the Ohio River Basin.

# Mitigation

The project will be mitigated by paying into the Kentucky Department of Fish and Wildlife Resources Stream Restoration Fund (in-lieu fee program). In addition mitigation for wetlands will be through the Southshore Wetland Bank in Greenup County. A 2:1 mitigation ratio will be utilized, yielding a 0.390 acre deposit. A summary sheet for expected impacts and associated in-lieu fees is attached. The fees were based on the Rapid Bioassessment Index. The summary indicates the fee per impact site.

US-68 Mason County - Stream Impact Summary Revisions KYTC Item No. 09-0124.01

Sta. 546+20 to 549+75 P1 Sta. 549+75 to 561+00 I4

Sta. 561+00 to 563+31 E7

Sta. 631+68 to 632+72 P2/P3 Sta. 681+04 to 681+90 E14 Sta. 681+22 to 683+80 I7 Pond 10

Wetland 1

10

Totals

Site #	Station Number	Flow Regime	Length (feet)	Impact Acreage	RBP Score	USACE ILF	Drainage Area (acres)	HUC 14	KY DOW ILF
1	Sta. 151+47 E18	Ephemeral	289	0.040	69	\$0.00	10.5	5100101220280	\$0.00
2	Sta. 549+25 I3	Intermittent	126	0.010	122	\$0.00	41.3	5100101220280	\$0.00
3	Sta. 589+00 I5a	Intermittent	430	0.034	57	\$51,600.00	71.3	5090201190010	\$51,600.00
	Sta. 589+00 Ib		306	0.034	57	\$36,720.00	77.4	5090201190010	\$36,720.00
4	Sta. 646+20 I6	Intermittent	468	0.032	94	\$56,160.00	125.4	5090201190010	\$56,160.00
5	Sta. 684+40 P4	Perennial	880	0.152	110	\$158,400.00	647.9	5090201190010	\$158,400.00
6	Sta. 701+47 I8a	Intermittent	59	0.010	85	\$0.00	97.5	5090201190010	\$7,080.00
	Sta. 701+47 I8b		90	0.010	85	\$0.00	116.7	5090201190010	\$10,800.00
7	Sta. 515+75 to 523+10 P1	Perennial	861	0.119	105	\$154,980.00	326.1	5100101220280	\$154,980.00
8	Sta. 546+20 to 549+75 P1	Perennial	413	0.047	134	\$74,340.00	92.5	5100101220280	\$74,340.00

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N/A 6,293

Intermittent

Perennial

Ephemeral

Intermittent Ephemeral

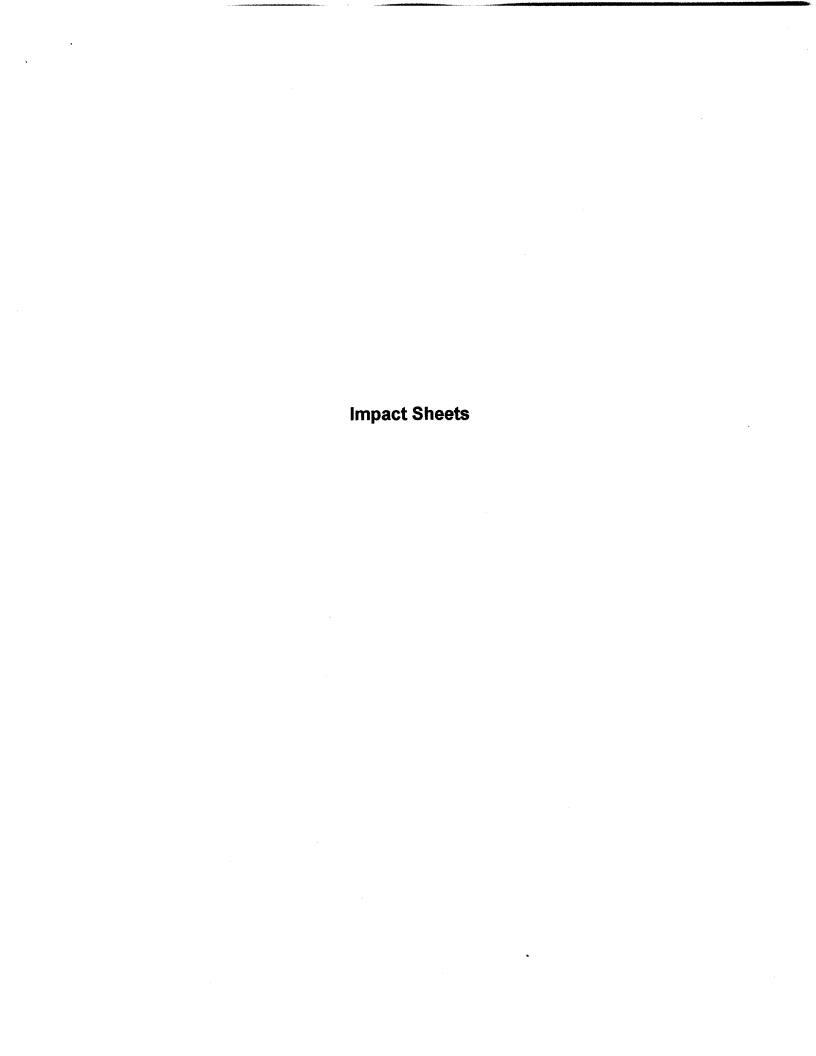
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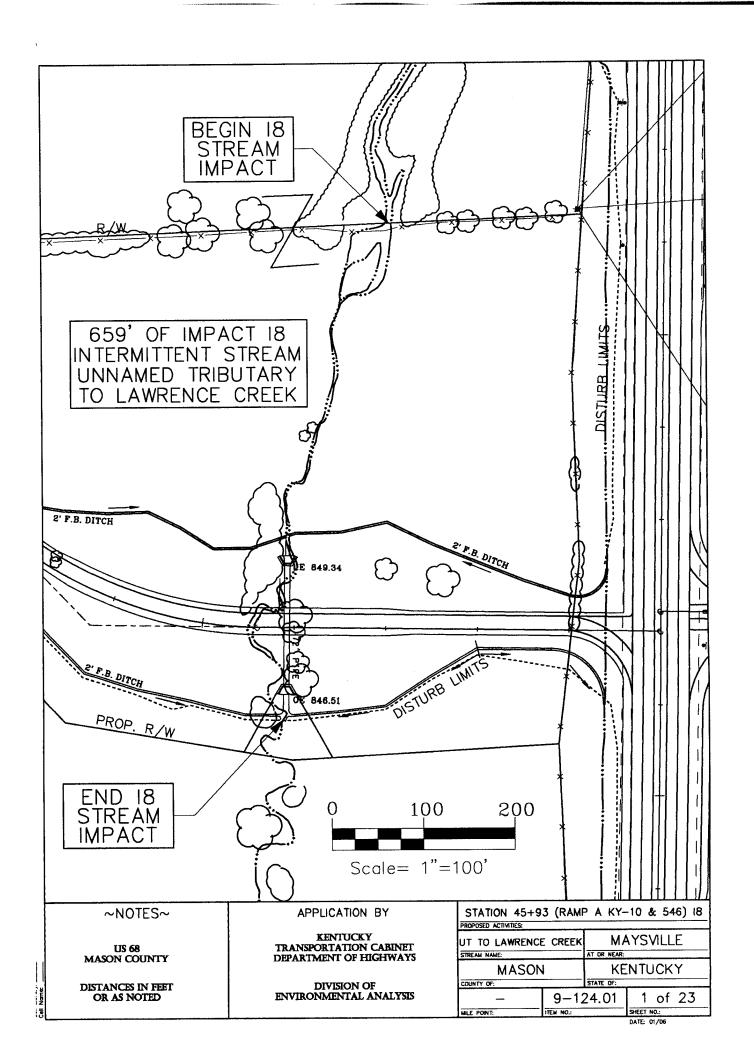
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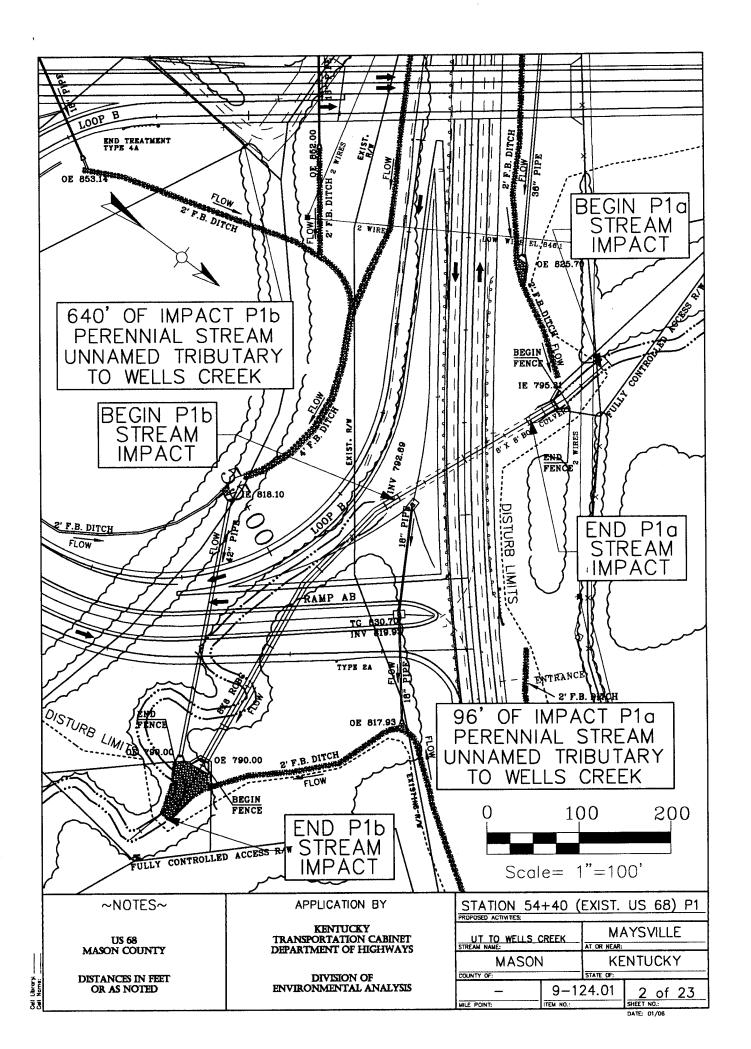
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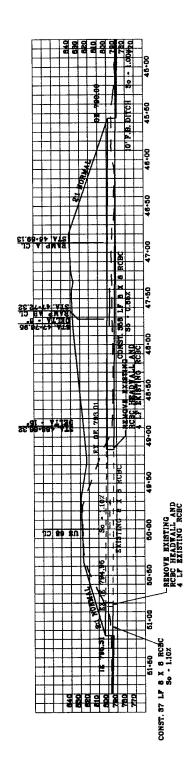
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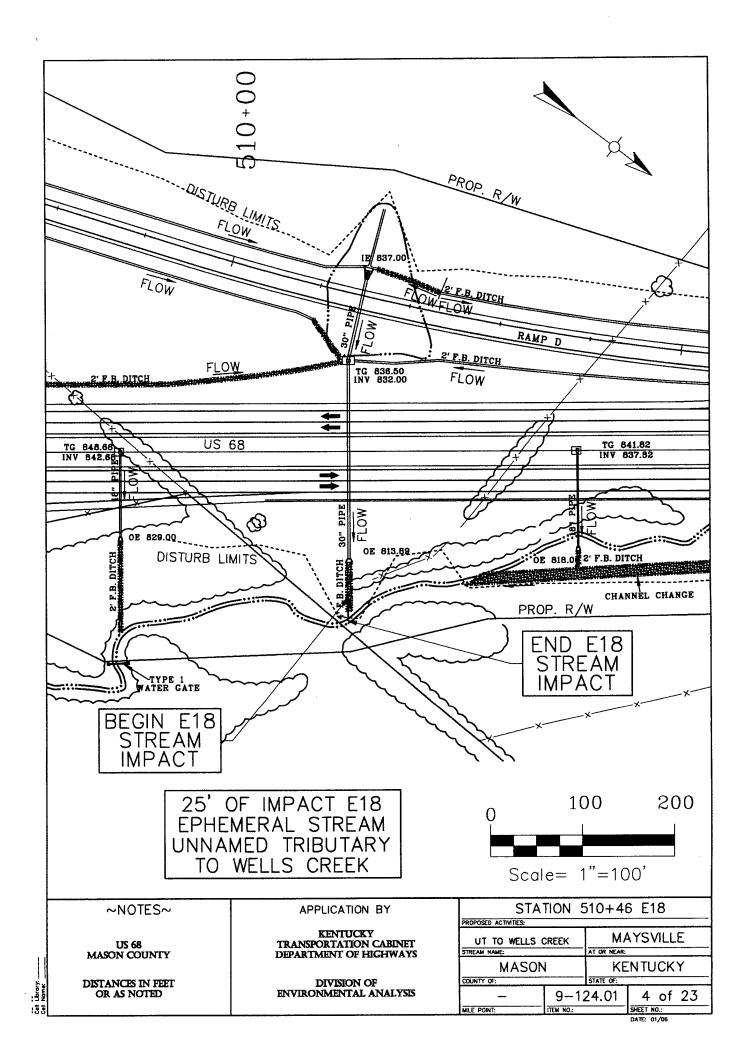


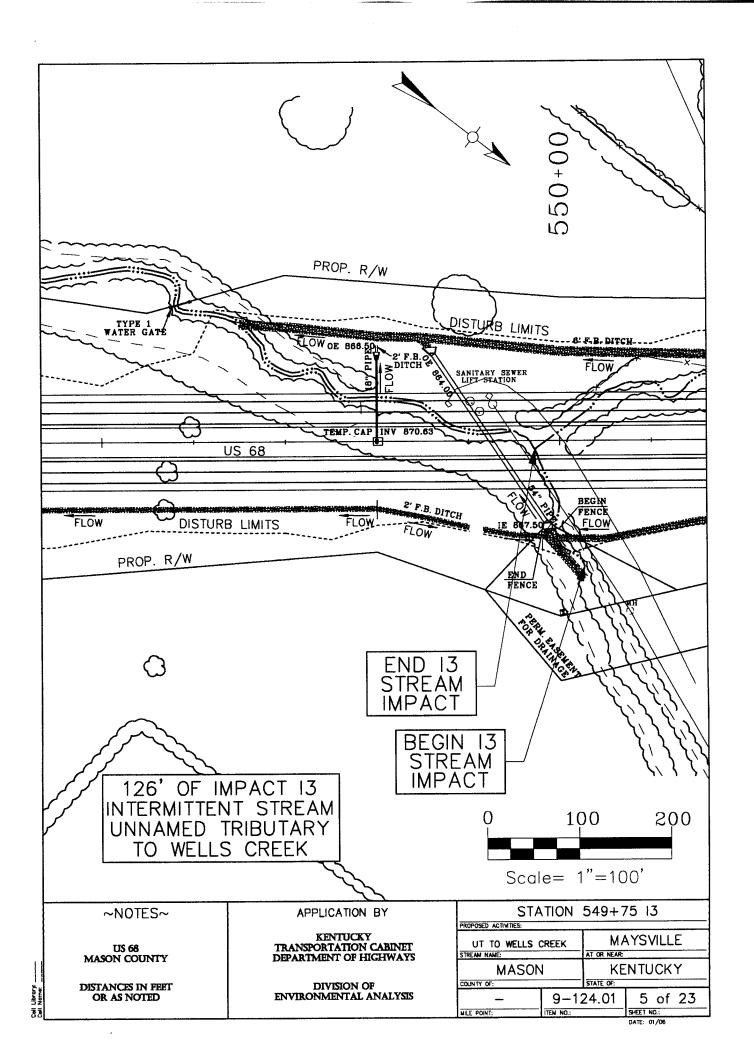


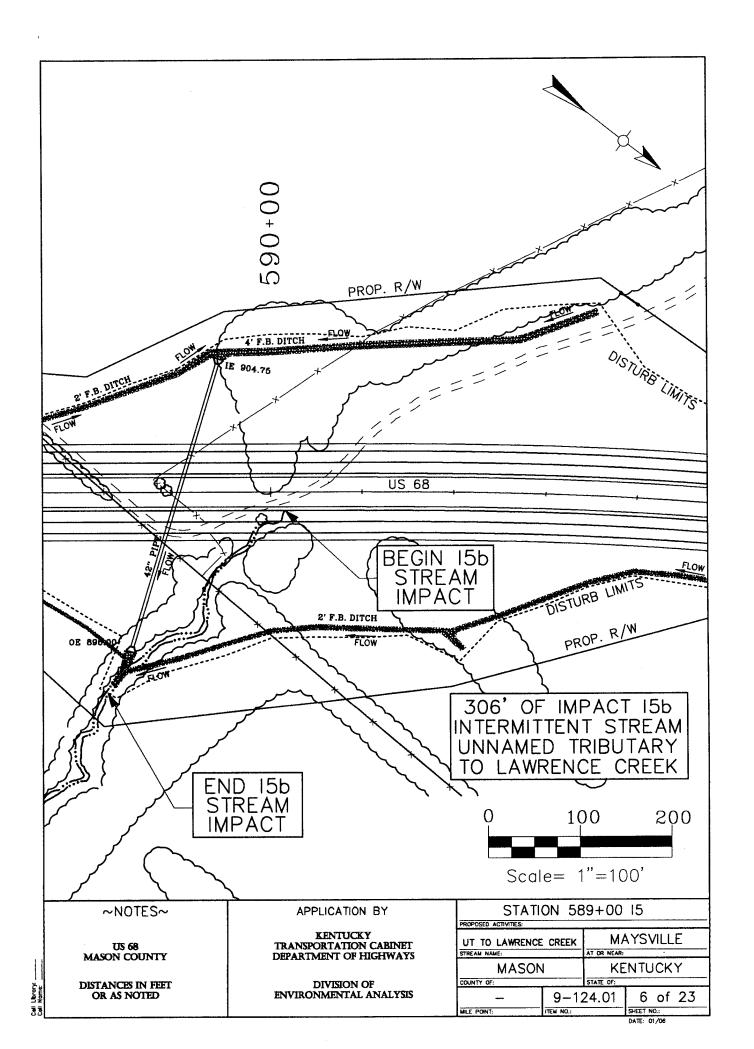


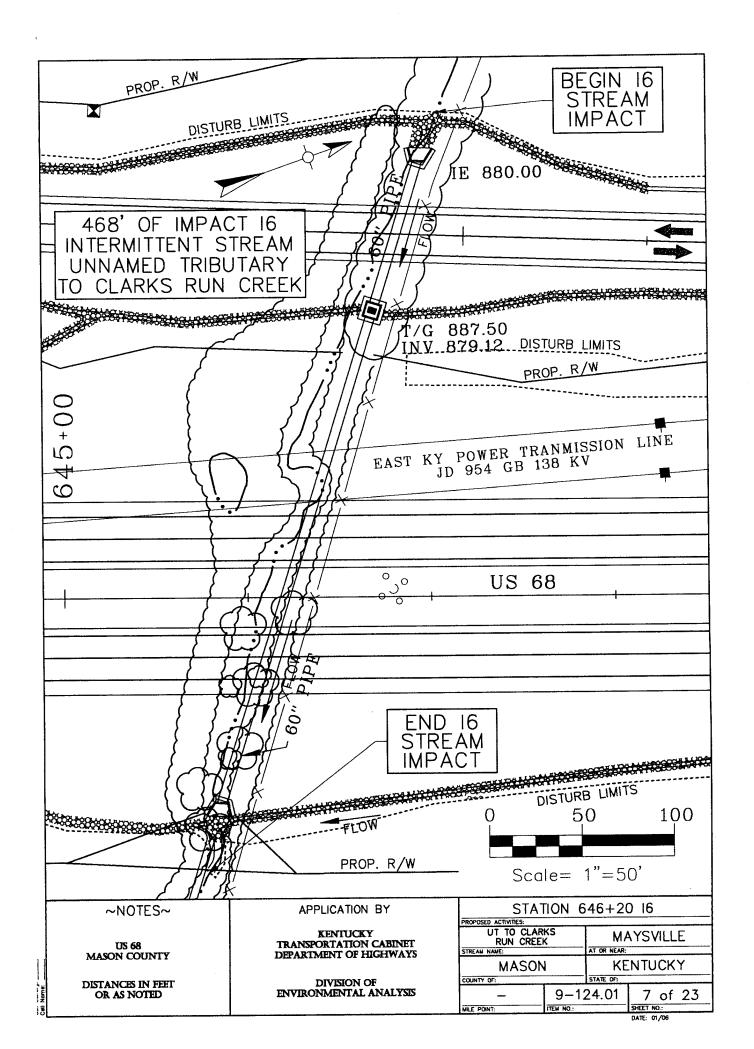
STATION 54+40 ~NOTES~ APPLICATION BY PROPOSED ACTIVITIES: KENTUCKY
TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS MAYSVILLE UT TO WELLS CREEK US 68 MASON COUNTY KENTUCKY MASON DIVISION OF ENVIRONMENTAL ANALYSIS STATE OF: DISTANCES IN FEET OR AS NOTED 9 - 124.013 of 23 ITEM NO.: MILE POINT:

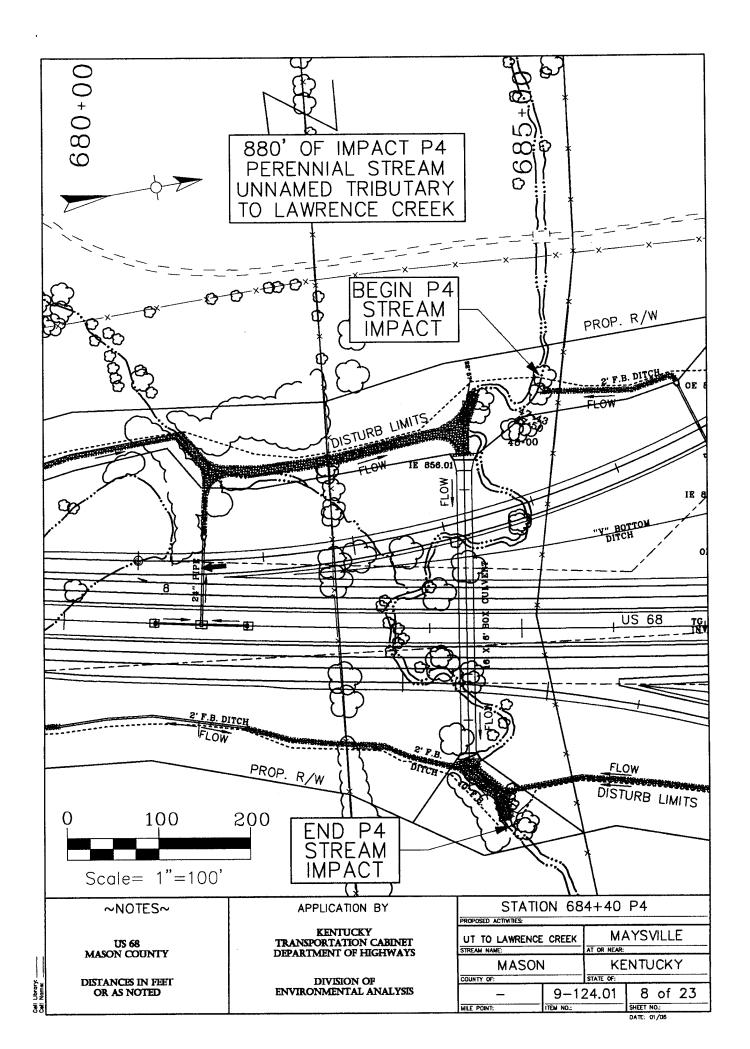
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~NOTES~	APPLICATION BY	STATION 684+40			
US 68 MASON COUNTY	KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS	PROPOSED ACTIVITIES:  UT TO LAWRENCE CRESTREAM NAME:	MAYSVILLE		
	DIVISION OF	MASON	KENTUCKY STATE OF:		
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